DP201 - Designing an Azure Data Platform Solution

Lab 6 – Designing for Efficiency and Operations
Exercise 1

Task 1: Maximize the Efficiency of your Cloud Environment.

List the Azure price calculator below:

https://azure.microsoft.com/en-gb/pricing/calculator

Provide a list of best practises that the IS department should follow to minimize costs.

Below are examples of the requirements that could be identified. (in no particular order)

#	Best practise	Service
1	Use SQL Database Elastic Pools to dynamically scale to optimizes performance and cost	SQL Database
2	Scale up Data Warehouse Units (DWU) when loading data, scale down once the loading is complete.	Azure Data Warehouse
3	Right size Data Service usage. i.e Use the correct DTUs, DWUs, RTUa etc	SQL Database Azure Data Warehouse Cosmos DB
4	Pause Azure SQL DWU compute operations when the data warehouse is not in use.	Azure Data Warehouse
5	Use Azure Blob Storage for data that is not queried, such as Archive Data	Azure Blob Store
6	Use Data Lake Store Gen II for data that is to be queried	Data Lake Store Gen II
7	Use partitioning to spread data across all the distributed storage as evenly as possible	Cosmos DB Azure Data Warehouse
8	Minimize the use of multiple write regions to meet business requirements while minimizing costs	Cosmos DB
9	Modify Streaming units to account for data volumes, query complexity and latency for streaming data	Stream Analytics